

## WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, WILLIS E. HURD, acting in charge]

## NORTH ATLANTIC OCEAN

By HERBERT C. HUNTER

*Atmospheric pressure.*—The mean pressure of April 1934 was lower than normal over most of the North Atlantic, though it was higher than normal over the north-central and northwestern portions, particularly near Labrador and Newfoundland.

There was a marked contrast in pressure conditions during the first and second halves of the month. From April 1 to 15, inclusive, pressure averaged about 0.5 inch greater than normal at Reykjavik, Iceland, and about 0.6 inch less than normal at Horta, Azores. The tendencies from the 16th onward at these stations were the reverse of those for the first half, but the departures from normal were only about one-half as large.

The lowest reading at any of the selected shore stations was 28.90 inches, at Julianehaab, Greenland, on the 27th. During the period 3d to 6th three vessels reported readings slightly lower than this. The first of these in time was noted but a short distance northeast of Horta; the other two were noted considerably farther to westward, and were near each other in both time and location; of these two, the reading of the American steamship *Padn-say*, at 5:30 a.m. of the 6th, is the lowest pressure yet reported from any part of the North Atlantic Ocean during the month, namely, 28.75 inches, in latitude 37°23' N., longitude 48°38' W.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, April 1934

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland.....	28.99		30.44	3, 5	28.90	27
Reykjavik, Iceland.....	29.94	+0.14	30.67	4	29.01	30
Lerwick, Shetland Islands.....	29.79	— .01	30.40	2	29.17	16
Valencia, Ireland.....	29.75	— .14	30.25	30	29.30	25
Lisbon, Portugal.....	29.83	— .06	30.19	21	29.43	1
Madeira.....	30.00	— .01	30.29	22	29.67	10
Horta, Azores.....	30.00	— .15	30.64	22	29.26	9
Belle Isle, Newfoundland.....	30.11	+ .28	30.48	1	29.58	26
Halifax, Nova Scotia.....	30.05	+ .12	30.76	30	29.68	21
Nantucket.....	30.01	+ .04	30.70	29	29.33	11
Hatteras.....	30.00	— .01	30.51	29	29.35	11
Bermuda.....	30.05	— .04	30.34	30	29.65	11
Turks Island.....	30.03	+ .01	30.16	2, 5	29.90	13
Key West.....	30.00	+ .02	30.16	2	29.73	12
New Orleans.....	30.02	+ .02	30.29	30	29.62	15
Cape Gracias, Nicaragua.....	29.90	+ .01	29.98	{ 1, 19, } 20	29.86	{ 4, 5, 11, 12, } 13, 16, 17

NOTE.—All data based on a.m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket and New Orleans, which are 24-hour corrected means.

*Cyclones and gales.*—Gales were decidedly fewer in number in April than was the case during any previous month of the year. No occurrence of a force-12 storm has yet been reported. There were especially few storms during the last 12 days of the month, while the 12-day period next before that included a very large portion of the month's storms especially of those that exceeded force 9. It is notable that the eastern half of the Atlantic was the main region of storm occurrence, as had been the case during March.

A low-pressure area noted south of Newfoundland on the 3d made slow progress eastward for several days, but developed much strength by the 7th. Charts VIII and IX present the situations on the 7th and 8th, when this storm was centered a moderate distance toward the west-northwest from the Azores, while high pressure prevailed over Greenland and Iceland, as had been the case since

April began. It was on the 8th that there occurred the sole instance yet reported of a wind of force 11 in the Atlantic area this month, the German motor vessel *Skagerrak*, from Port Arthur to Antwerp, noting this force while near latitude 37° N., longitude 49° W.

By the 11th the storm center mentioned had reached the Bay of Biscay in its eastward advance, but a following low-pressure area had attained considerable development between Newfoundland and the Azores, and by the 12th was still better developed just north of the Azores. At this time unusually high pressure covered Newfoundland, Labrador, southern Greenland, adjacent waters, and the northern part of Hudson Bay; while still another marked area of low pressure was centered near New York City, and was strongly affecting coastal nearby waters. High winds occurred at this time in the northeastern portion of the United States, an extraordinarily high velocity being noted at the station on the summit of Mount Washington, N.H. The conditions on the 11th and 12th appear on charts X and XI.

Behind the low-pressure area over the northeastern part of the United States there was high pressure over the Plains. This situation favored the carrying of dust or fine sand over the Gulf of Mexico, some of which was noted as deposited on the 12th on the steamship *William Boyce Thompson*, then about 120 miles south-southeastward of South Pass, La., the winds experienced being from northwest to north. The same vessel reported that quite a few land birds of different kinds were near the ship during the forenoon of the next day.

A press dispatch states that on the night of the 13th a severe local storm struck the coast region of Mexico south of Vera Cruz. At this writing no information has come to indicate that any vessel in the southwestern part of the Gulf of Mexico encountered this storm, and it is thought that it was of very small extent. Fresh gales were experienced, however, near the Yucatan Channel, on the 17th, and not far from the western coast of Louisiana on the 19th.

*Fog.*—While fog was of infrequent occurrence to southward of Cape Hatteras, it occurred often in the vicinity of the coast between Capes Hatteras and Cod, where it was for the most part about as frequent as it had been during the preceding March. Here the middle decade of the month was the time of most frequent prevalence, while the final decade was almost wholly free from fog.

From Cape Cod eastward to mid-Atlantic fog was more prevalent than it had been during the month preceding and occurred considerably oftener than is usual during April. The square between parallels 40° and 45° north, meridians 45° and 50° west, is indicated as the area of most frequent occurrence, as reports show fog there on 18 days; there and in the adjoining 5° squares to northward or westward the portion of the month with fog least prevalent was about the 9th to 17th.

From the 40th meridian eastward to European waters there was little fog. In particular, there has come as yet only a single report of any occurrence of fog during the month within the area bounded by parallels 35° and 50° north, meridians 10° and 30° west, though normally fog is encountered in most of this area on from 1 to 3 April days.

There were a few accidents to vessels caused by collision or grounding due to fog during April in Atlantic waters, but they were of comparative unimportance.